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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,622	06/26/2000	Eiichiro Kawakami	32011-164584	3193

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EXAMINER

SHAW, JOSEPH D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/603,622

Applicant(s)

KAWAKAMI ET AL.

Examiner

Joseph D Shaw

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Homma et al. (5,572,678).

- a. As per claim 1, Gonno teaches a broadcast communications method comprising of a transmitter (main station), with transmitting means, that transmits data to one or more receivers (substation)(col. 3, lines 35-40); receivers with a receiving means for receiving the transmitted data (col. 3, lines 59-64); and a retransmission request transmitted by the receivers and received by the transmitter only when the data has not been successfully (normally) received (col. 3, lines 64-67, col. 4 lines 1-3). However, Gonno does not explicitly teach the main station, after transmitting the data, transmitting a message inquiring whether the data was received normally. Homma teaches a system for sending data from a sender to a receiver(s) where the sender sends an inquiry to the receiver(s) about reception status after the transmission of the information frame (data)(Fig. 7; col. 8, lines 7-12). It would have been obvious

to one of ordinary skill in the art at the time the invention was made to include inquiring about the reception status of data as taught by Homma in the method of Gonno because such protocol would provide for a broadcast or multicast communications service of high reliability as taught by Homma (col. 1, lines 52-63).

b. As per claim 2, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches a predetermined waiting time after data transmission where the transmitter receives retransmission requests (col. 9, lines 25-28).

c. As per claim 3, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches transmitting more data when the period of time for waiting for retransmission requests is up (Fig. 5).

d. As per claims 4 and 5, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the sender determining that all data was completely received (no retransmission requests within the abovementioned time) and transmitting the next set of data (Fig. 5; col. 11, lines 31-40).

e. As per claims 6 and 7, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the sender determining at least one of the receivers failed to successfully receive the data (retransmission

request within the abovementioned time) and retransmitting data to the receivers (Fig. 5; col. 11, lines 41-57).

f. As per claim 8, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches limiting the number of retransmissions (col. 10, lines 25-32).

g. As per claims 10 and 11, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the receivers determining if they have already received the packets (data) and if so, deleting the packets, otherwise storing them (Fig. 7; col. 13, lines 10-35).

h. As per claim 12, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches a system consisting of one sender and a plurality of receivers (Figs. 9A, 9B).

i. As per claim 13, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the sender and receivers connected by a communication link (common transmission line)(Figs. 9A, 9B; col. 1, lines 56-57).

3. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Homma et al. (5,572,678) as applied to claims 1-8 and 10-13 above, and further in view of Gagne et al. (5,473,608).

j. As per claim 9, Gonno discloses the claimed invention modified by Homma as described above. However, the Gonno/Homma system does not explicitly

teach allowing the main station a means for changing the prescribed number of retransmissions allowed. Gagne teaches a method of communications in a distributed network that includes a user-defined timeout (col. 18, lines 5-6) and other customizable communication primitives (col. 2, lines 61-67, col. 3, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include customizable communication primitives (including retransmission limits) as taught by Gagne in the system of Gonno/Homma because customizable communication primitives allow for specific, customized communications based on the users needs as taught by Gagne (col. 2, line 67, col. 3, lines 1-3).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - k. Davis et al. (6,141,784) teaches retransmission of abnormally received data, ignoring duplicate data.
  - l. Oda (6,081,568) teaches retransmission of frames due to no acknowledgements.
  - m. Hayakawa (5,935,267) teaches requesting retransmission of abnormal data during free time between data communications.

n. Miller et al. (5,727,002) teaches sending only negative acknowledgements in a data communication system.

o. Quiros (5,604,771) teaches keeping a negative acknowledgement (retransmission) counter in communications to prevent infinite retransmissions due to poor connections.

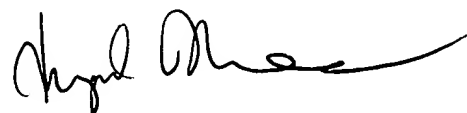
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Shaw whose telephone number is 703-305-0094. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 4:00 PM, and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3718 for regular communications and 703-305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.



JDS  
July 25, 2003



RUPAL DHARIA  
PRIMARY EXAMINER